

WT 12-176
Whiffletree Corporation Inc.
P.O. Box 27
Bridgton, Maine 04009

FILED/ACCEPTED

JUN 26 2012

Federal Communications Commission
Office of the Secretary

April 30, 2012

Federal Communication Commission
P.O. Box 979097
St Louis, MO 63197- 9000

WORKING COPY ORIGINAL

Dear Federal Communication Commission,

The purpose of this letter is to request that the Federal Communication Commission (FCC) Grant to Seareka, a waiver allowing Seareka to operate their Maritime Survivor Locating Device hereafter referred to as "MSLD" on the frequency 869.4 MHz to 869.65 MHz with a maximum output power of 500 mw. The Seareka MSLD system will comply with the RTCM Standard 11901.0 and relevant appendix.

The Seareka MSLD is a transceiver system which is normally worn on individual inflatable life vest or other survival equipment. This transceiver is automatically activated by the inflation of the life vest or submerging of the individual into water. Once activated, the MSLD performs two vital functions; first it immediately begins transmitting an alarm signal on 869.4 MHz to the parent vessel. The transmission sends a digital identification code that is unique to that transceiver therefore identifying the individual or individuals that have gone overboard to the parent vessel. At the same time any other vessel within receiving range that has the MSLD receiver, receives the same alert however, because of the unique digital identification other vessels that receive the alert of the emergency situation knows that the emergency is from another vessel. This way the alerting is first sent out locally giving the parent vessel and others in the area an opportunity to rescue the individuals rapidly without alerting unnecessarily the national rescue authorities.

The second vital function of the MSLD is that while the transceiver is transmitting the alarm the GPS receiver in the transceiver is activated and begins to acquire the GPS signals. Once the GPS location is identified the GPS coordinates are added to the digital transmission and any boat receiving the alert then has bearing and range to the transmitting transceiver or transceivers. The incoming transmission with the GPS location can be displayed on a ships plotter and the coordinates are shown on the MSLD's display. By having location of the transceiver the rescue vessel will know bearing and range to the emergency. Since the GPS information is available there is no need for a direction finder and therefor you eliminate the ambiguity and uncertainty that is inherent in using a direction finding device. Additionally the GPS location is updated every 20 seconds and the new coordinates are displayed on a chart plotter and the MSLD display so there is no need to plot drift or windage movement of the transmitter because it is constantly updating

The MSLD is made up of three main components the onboard transceiver, the onboard antenna and the personal transceiver that is attached to the inflating life vest or other survival equipment. By imbedding the personal transceiver in the inflating life vest or survival equipment you reduce the chances of false alerts. By reducing false alerts you strengthen the validity of the emergency and increase the potential response from external vessels.

Whiffletree Corporation Inc.

In requesting this waiver we have researched and identified several key points that we would like to bring to your attention. First, this frequency for the most of the world has been set aside as an open or free frequency and is the only one of its type with global acceptance. We have identified that in the US there are other land based transmitters using this 869.4 MHz to 869.65 MHz as their frequency. Because there is a potential opportunity to have multiple transmissions on the same frequency the transceiver uses a polite protocol that checks for other traffic prior to transmitting. That way if there is a transmission on 869.4 MHz to 869.65 MHz under way the MSLD will wait until the frequency is quiet before making its transmission. Since this is a digital device the transmission signal has a time span of 120 millisecond and such a short digital burst will not cause interference with other transmissions. The power output of the transceivers is limited to 500mw so the area affected by the transmission is limited to line of site and since this is designed for open water usage the likely hood of interference with land based transmissions is greatly reduced. (Practically zero)

One of the major benefits of approving this waiver will be the universal usage of the product. This system is already being delivered in Europe and Asia and has been accepted by the European yachting and boating community and some European and Asian military's. Any of these vessels that are within range of the activated MSLD transceiver will receive the emergency signal and increase the potential response to the emergency call. If Seareka is forced to use a different frequency for the United States, it will have a significant negative impact on all users of this product. By separating the users into two groups by frequency, rather than allowing a coordinated team effort to support the rescue, we are potentially jeopardizing a life that could have been saved if all of the systems were on the same frequency. Additionally if we were required to transmit on a different frequency in the US the costs of producing a dual channel system would be prohibitive as it would require a large separation of the two frequencies and a complete redundancy of components.

Additional features of the MSLD include a 30 minute waiting period before sending an automated DSC all ships emergency call. This transmission clock starts with the initial triggering of the alarm. The captain has the ability to override the timer if he/she feels the situation is in hand. If the emergency is more imminent the captain can trigger the DSC all ships emergency call sooner if necessary.

In the event of the parent ship is lost, with updating of the GPS transmitted location every 20 seconds a ship responding to the emergency will see each target individually. Vessel approaching the emergency location can rescue the individuals in order of closets to farthest to expedite retrieval. Since the GPS is updating there is no need to calculate windage and current

Specifically we are requesting a waiver of 47 CFR Part 80.1061 the EPIRB rules which includes:

- (a) Frequency Instead of 406.0-406.1 MHz the MSLD will transmit on 869.4 -869.65 MHz
- (b) The Homing frequency of 121.5 will not be needed as explained above.
- (c) There are not any requirements for independent testing by a certified test facility for RTCM standard 11901.0 so please waive this requirement.
 - (1) We will submit a letter stating that the entire qualifying tests have been accomplished with test results to the Commandant (G-MSE) U.S. Coast Guard, 2100 2nd Street SW, Washington, DC 20593-0001.
 - (ii) Please waive the requirement as the MSLD is not a COSPAS/SARSAT system.
 - (iii) Please waive this requirement as it will be included under number (1) above.
 - (d) Please waive the 406.0-406.1 MHz EPIRB as we will request US Coast Guard to submit a letter that states that the MSLD satisfies the RTCM SC11901.0 and relevant appendix.

Whiffletree Corporation Inc.

(e) Please waiver as this rule as it is not applicable to the MSLD system.
(f) Please waiver as this rule as it is not applicable to the MSLD System.
(g) Please waiver the 406.0-406.1 MHz and insert 869.4-869.65 MHz.
Additionally Please waiver the 5 Watt power requirement as this is only a short range system and we intend to limit the output power to 500 mw.

If you have any questions about the system or this application for a waiver of 47 CFR Part 80.1061 please do not hesitate to contact me.

Sincerely

George E. Lariviere
Vice President
Whiffletree Corporation Inc.
P.O. Box 27
Bridgton, ME 04009

Phone: 1-207-647-3300
Fax: 1-207-647-3700

Attachments:

Check for FCC
FCC 605 Main Form
FCC Form 159
Sample of current DIVANSI Brochure
Seareka Background and explanation of MSLD
Copy of rules that govern the current MSLD system in France.
Copy of approval by the Bureau Veritas for the SEAREKA MSLD
Copy of presentation for information on the MSLD System.



seareka

Membre du



Cluster Maritime Français

The Company Seareka ® comes from association of professional sea Diver and electronics engineers to develop a personal safety product which localize Man Over Board and meets the requirements of the work of the Sailors.

Our company has been Laureate of the contest for innovative entrepreneurship setting up by the Ministry of Research in 2007 and has received numerous other awards, such as the Innovation Award Captronics or prize for innovation for the GEP for its new flagship product "Man Overboard" named "Divansi MOB"



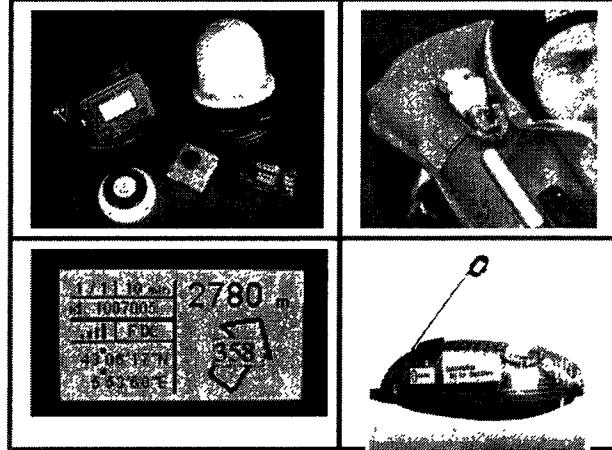
Our field experience has enabled us to achieve a product highly adapted to the conditions for seaman (usability, supportability). This system named "Divansi MOB" is used to trigger an Alarm, give a GPS position in real time on an intuitive interface of the person fold at sea. The beacon is integrated directly into the safety vest, with an automatic trigger essential due to the stress of the accident.

Each system can handle up to 30 tags and has the advantage of operating in fleet

PROTECT: The Man Overboard by keeping him on surface with inflatable lifejacket

ALERT: The crew about a man overboard by the trigger of the tag cleverly integrated into the safety vest

RESCUE: The Man Overboard by plotting on an intuitive console coordinates in real time.



The "Divansi MOB" was selected by the IMP (Institute of Maritime Prevention) for national trials. We have already equipped more than 90 fishing and SNSM vessels. With this experience and matching the regulatory aspects of the Merchant Marine, our product is finalized. The commercial launch will be the end of 2011.

Contact Stéphane Léal : stephane.leal@seareka.com

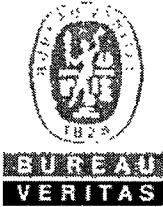
Seareka® SAS

Siège : Immeuble HERMES, Lieu dit du Garon D386/D117, 145 Route de Millery 69700 MONTAGNY

Tél : 06 09 47 78 58

E-mail : contact@seareka.com

R&D : Bouée Borha - Corniche du bois Sacré Espace Joseph Grimaud - 83500 La Seyne sur Mer - 04 94 92 86 67
SAS au capital de 37 000 EUR – Siren : 500 807 458 RCS Lyon – TVA Intracommunautaire : FR 565 008 074 58



MARINE DIVISION

Numéro de certificat : 26503/A0 MMF

Numéro de dossier : RAD 9/79511/1

Code produit : C3400

Ce certificat n'est pas valable lorsque présenté sans les pages suivantes comprenant au moins 7 paragraphes

www.veristar.com

CERTIFICAT D'APPROBATION DE TYPE

Agissant dans le cadre de sa notification par les Autorités Maritimes Françaises selon les dispositions prévues par l'Article 310-1.02 du Règlement annexé à l'Arrêté du 23 novembre 1987 modifié, BUREAU VERITAS atteste avoir vérifié la conformité de la conception du matériel ou matériau désigné ci-après vis-à-vis des dispositions applicables des exigences énumérées ci-dessous

Ce certificat est délivré à

SEAREKA
MONTAGNY - FRANCE

pour le type de produit

ALARM SYSTEMS FOR MANOVERBOARD AND SALVAGE ACTIONS "DAHMAS"

DISPOSITIF D'ALARME D'HOMME A LA MER ET D'ACTIONS DE SAUVETAGE
DIVANSI MOB

Digital message containing updated GPS coordinates /
Message Numérique contenant les coordonnées GPS actualisées

Exigences :

French MMF Regulations Division 332 and Division 310
IEC 60945(2002)

Ce certificat est valable jusqu'au : 20 Oct 2016

Pour BUREAU VERITAS,

A BV MARSEILLES, le 20 Oct 2011,

Sai-hang LOO



Ce certificat est valable jusqu'à la date indiquée ci-dessus, sauf s'il est annulé ou révoqué, pourvu que les conditions indiquées dans la(s) page(s) suivante(s) soient respectées et que le produit reste satisfaisant en service. Ce certificat n'est plus valable si le fabricant effectue des changements ou des modifications du produit approuvé, qui n'auraient pas été notifiés à BUREAU VERITAS et acceptés par écrit par BUREAU VERITAS. Si les Règlements ou les standards sont modifiés au cours de la période de validité de ce certificat, le(s) produit(s) doit/doivent être ré-approuvé(s) avant d'être placé(s) à bord de navires pour lesquels les modifications sont applicables. La marque de conformité " MMF " ou " MMF/PL " ne peut être apposée par le fabricant sur le(s) produit(s) objet de ce certificat qu'à la condition que les dispositions décrites au paragraphe 5 de ce certificat soient respectées.

Ce certificat est délivré dans le cadre des Conditions Générales de la Division Marine de BUREAU VERITAS disponible sur le site internet www.veristar.com. Toute personne qui n'est pas partie au contrat aux termes duquel ce document est délivré ne pourra engager la responsabilité de BUREAU VERITAS pour les inexactitudes ou omissions qui pourraient y être relevées ainsi que pour les erreurs de jugement, fautes ou négligences commises par le personnel de la Société ou par ses agents dans l'établissement de ce document et dans l'exécution des interventions qu'il comporte

PROGRAMME D'APPROBATION

1. PRODUCT DESCRIPTION / DESCRIPTION DU PRODUIT :

Divansi MOB is an autonomous Man-Over-Board search system. It automatically alerts the crew to the fact that a person has fallen overboard and then guides them to the location of the MOB.

Once activated, Divansi MOB provides continuously updated information on bearing and GPS coordinates of the MOB.

Divansi MOB est un système autonome qui permet l'envoi d'une alerte automatique à l'équipage lors de la chute d'un homme à la mer. Il donne une localisation immédiate du naufragé.

Dès qu'un émetteur est activé, le système Divansi MOB affiche en permanence les coordonnées GPS de la balise et la direction à suivre pour retrouver l'homme à la mer.

Display / Affichage MOB SV82N	
Degree of protection / Indice de protection	IP 67
Weight / Poids	300 g
Dimensions	130 x 110 x 50 mm
Operating temperature / Température de fonctionnement	-10 up to / à +55 °C
Supply voltage Vin / Tension d'alimentation	8 to / à 30 Vdc
Internal buzzer / Buzzer interne	yes
Antenna / Antenne Dôme MOB AV17	
Degree of protection / Indice de protection	IP 66
Weight / Poids	400 g
Dimensions	Diam. 172mm Height / hauteur 145 mm
Operating temperature / Température de fonctionnement	-20 up to / à +65 °C
Frequency / Fréquence	869.4 MHz to / à 869.65 MHz
Output power / Puissance de sortie (E.R.P.)	500 mW
Supply voltage Vin / Tension d'alimentation	provided by the display / fournie par l'affichage
Transmitter Beacon / Balise émettrice MOB BV12	
Degree of protection / Indice de protection	IP 68
Weight / Poids	150 g
Dimensions	130 x 55 x 45 mm
Frequency / Fréquence	869.4 MHz to / à 869.65 MHz
Operating temperature / Température de fonctionnement	-20 up to / à +65 °C
Battery lifetime (storage) / Durée de vie des piles (stockage)	Battery/ Batterie Lithium 3 years / ans
Battery lifetime (operation @ 20°C) / Durée de vie des piles (en émission @ 20°C)	Min. 12 hours / heures

2. DOCUMENTS AND DRAWINGS/PLANS DE CONCEPTION et/ou SPECIFICATIONS :

2.1 - Documentation No. 203928 - SEAREKA - Divansi MOB dated / date 07/2011

2.2 - Operation Manual / Manuel d'utilisation dated / date 07/2011

2.3 - Document "Connection of Divansi MOB beacon on life jackets / Montage de la balise Divansi MOB dans le gilet à bord du navire"

3. TEST REPORTS /RAPPORTS D'ESSAIS DE TYPE :

3.1 - Test report / Rapport d'essais No.203928 ES Ed.1.0 dated / date 07/2011 issued by / délivré par KENTA

3.2 - Test report / Rapport d'essais No.203928 EMC Ed.1.0 dated / date 07/2011 issued by / délivré par KENTA

3.3 - Test report / Rapport d'essais No.203928 RADIO Ed.1.0 dated / date 07/2011 issued by / délivré par KENTA

3.4 - Test report / Rapport d'essais No..203928 DAHMAS Ed.1.0 dated / date 07/2011 issued by / délivré par KENTA

3.5 - Test report / Rapport d'essais No.97796-594260 dated / date 16/0307/2010 issued by / délivré par LCIE

3.6 - Sea trials test report / Rapport d'essai en mer carried out / effectué le 30/09/2011 witnessed by / en présence de BV representatives / représentants

4. APPLICATION / LIMITATION :

4.1 - Automatic activation is possible only when the system is fitted inside an automatic inflating life jacket / *Le déclenchement automatique de l'émetteur n'est possible que lorsqu'il est intégré dans une brassière à gonflage automatique.*

4.2 - Each type or model of Life jacket integrating the above system is to be type approved according to directives 96/98 CE, 89/686 CE, EN396 and is to be submitted to the Manufacturer for approval / *Chaque type ou modèle de gilets de sauvetage intégrant le système devra être approuvé conformément aux directives 96/98 CE, 89/686 CE, EN396 et devra être soumis à l'approbation du fabricant.*

4.3 - On board installation is to be carried out in accordance with Division 332 regulation 332-3 / *L'installation à bord se fera conformément à l'article 332-3 de la Division 332.*

5. PRODUCTION SURVEY REQUIREMENTS./EXIGENCES DES INSPECTIONS DE PRODUCTION :

5.1 - The above products are to be manufactured, examined and tested by SEAREKA SAS, in accordance with the type described in this certificate and Bureau Veritas Rules for the Classification of Steel Ships / *Les produits susmentionnés doivent être fabriqués, examinés et testés par SEAREKA SAS, conformément au type décrit dans ce certificat et suivant le Règlement Bureau Veritas pour la Classification des Navires en acier.*

5.2 - Production sites are to be recognized by Bureau Veritas as per NR320 for HBV products. To this end SEAREKA SAS, has to make the necessary arrangements for a Society's Surveyor to perform visits and product audits at the production sites / *Les sites de production devront être reconnus par le Bureau Veritas suivant la NR320 pour les produits HBV. A cette fin SEAREKA SAS, doit prendre les dispositions nécessaires pour que l'expert de la Société puisse effectuer les visites et audits des sites de production.*

5.3 - SEAREKA SAS, has declared to Bureau Veritas that the types of products described in this certificate are manufactured at the following production sites / *SEAREKA SAS, a déclaré au Bureau Veritas que les types de produit décrits dans ce certificat sont fabriqués dans le site de production suivant :*

EFS
Zac du baconnet
192, allée des Chênes
69200 Montagny
FRANCE

6. MARKING OF PRODUCT/MARQUAGE POUR IDENTIFICATION :

6.1 - Maker's name or trade mark / *Le nom du fabricant.*

- Type designation, serial number, type of battery specified / *Le numéro de type ou l'identification du modèle, type de batterie*

- Date of battery replacement / *date de péremption de la batterie*

- Adequate instruction to enable manual activation, deactivation and self test / *Instructions succinctes pour permettre une activation manuelle, une désactivation et essai*

6.2 - Compass safe distance / *Distance de sécurité du compas* : without restriction/ *aucune limitation*

6.3 - Mark of conformity / *La marque de conformité: 0062/MMF/XX*

(where XX is the year of manufacturing / *XX correspondant à l'année de fabrication)*)

7. OTHERS / AUTRES :

This approval is given with the understanding that the Society reserves the right to require check tests to be carried out on the system at any time and that SEAREKA SAS, will accept full responsibility for informing shipbuilders, shipowners or their sub-contractors of the proper methods of use and general maintenance of the system and the conditions of this approval / *Dans le cadre de cette approbation, la Société se réserve le droit d'effectuer des essais par échantillonnage à n'importe quel moment. Le fabricant, SEAREKA SAS, accepte la responsabilité d'informer les chantiers de construction, les armateurs ou leurs sous-traitants des conditions d'utilisation et de maintenance du système susmentionné.*

*** FIN DU CERTIFICAT ***



seareka



**First system fully automatic,
for Detection, Alarm,
Location and Tracking of
ManOverBoard**



seareka



Divansi®
MOB

- The network Divansi ® is a private radio network for the localization of persons and / or object at sea. This comes in the type:
 - **Divansi®MOB : for the MOB (Distress)**
 - **Divansi®MOB - TRAining**
 - Divansi®TRACK : for monitoring of persons and objects (Person Overboard - annex - survey - etc.)
 - Divansi®SCUBA: for tracking divers surface (drift pre





seareka

Seareka briefly

- Following the expertise of professionals of the Sea (former divers and electronic engineers).
- This has developed the Divansi ® MOB safety device. Its spectacular performance contribute to the safety of crew members overboard while meeting the stringent requirements of usability and supportability, necessary to avoid employment at sea on a daily basis.

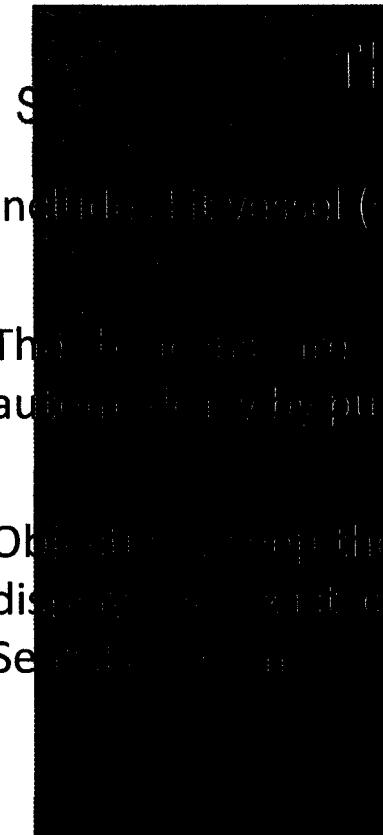
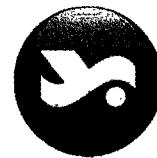


seareka

The main Awards and

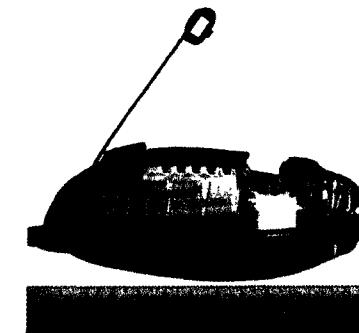
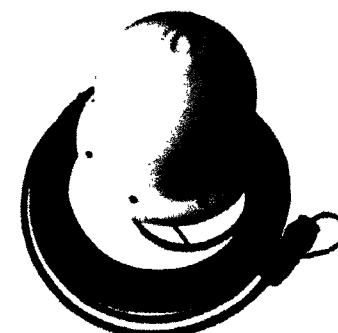
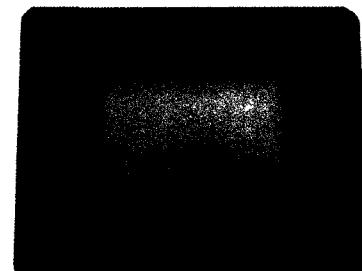
- The Innovation Trophy 2011 ITECH'MER France
- Flagship IMP (Institute of Maritime Prevention) Safety at Sea 2011" France
- The "Innovation Award of GEP 2010 (Group of oil and Gas Companies)" Innovation Prize
- The award for innovation CAP'TRONIC
- Winner of the National Research Ministry France Innovation Competition
 - 2006, "emerging" category
 - 2007, category "Creation-Development".





The Divansi®MOB system

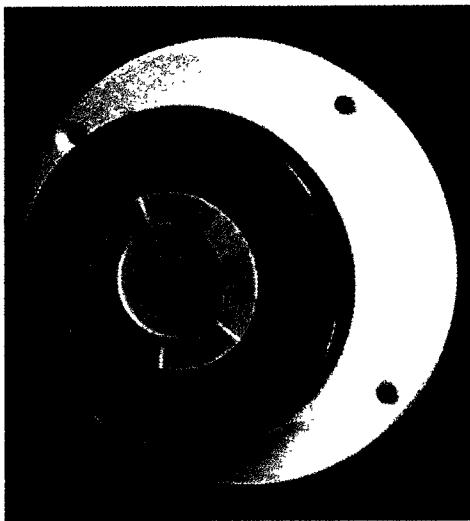
- Individual floatation (screen and antenna) and beacons.
- The beacons and part of a safety vest and inflatable are activated automatically by pulling pin when it opened.
- Object to keep the crew on the surface, trigger the alarm on board and display the exact coordinates of the castaway in real time on intuitive Screen.



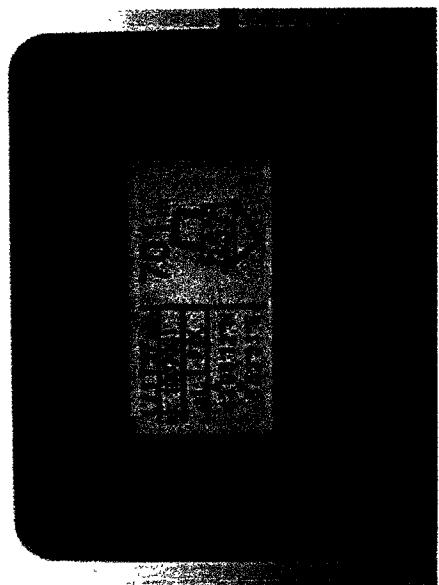
Protect



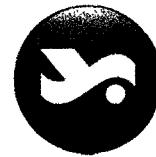
Alarm



Rescue

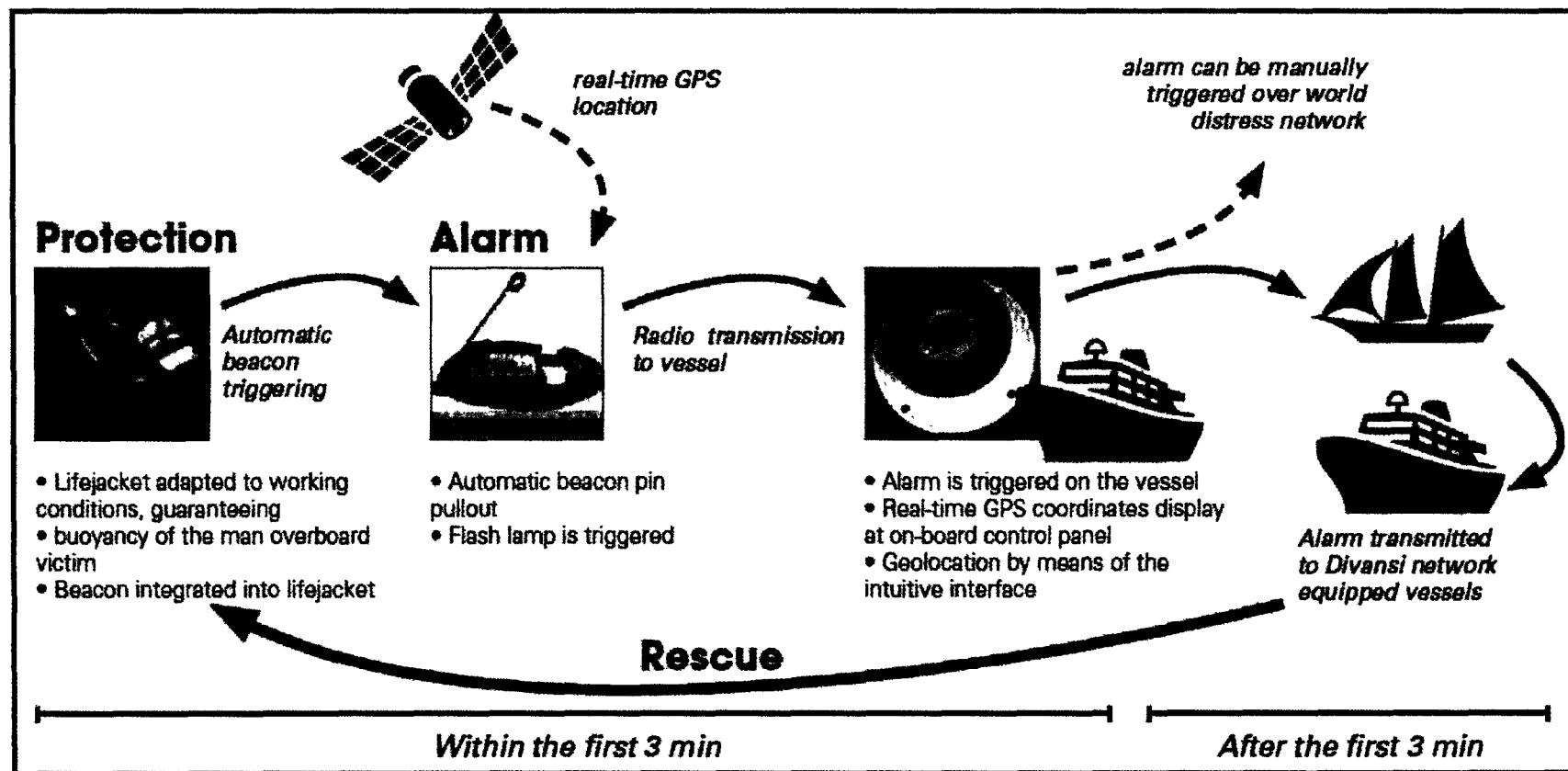


seareka



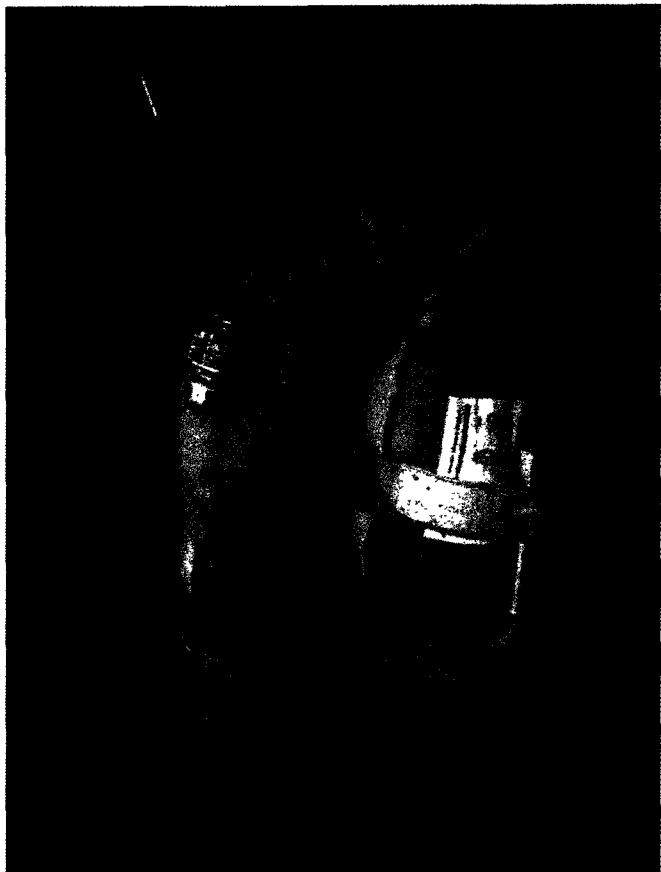
seareka

Protection Alarm Rescue



Different Vests with a beacon integrated

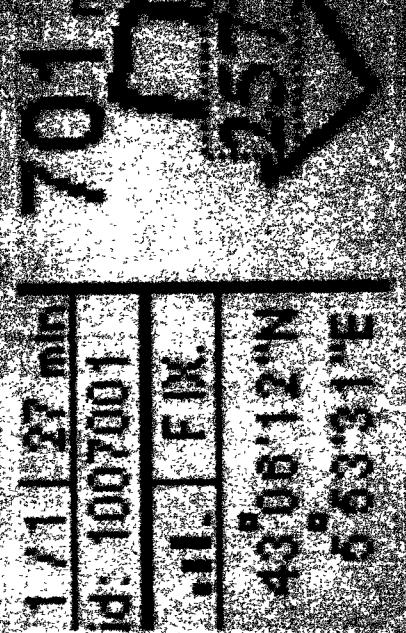
Gilet 150n (EN296)
Gilet 275N (96/98CE)



Intuitive
interface

Position of the
Man Overboard
Follow the
arrow!

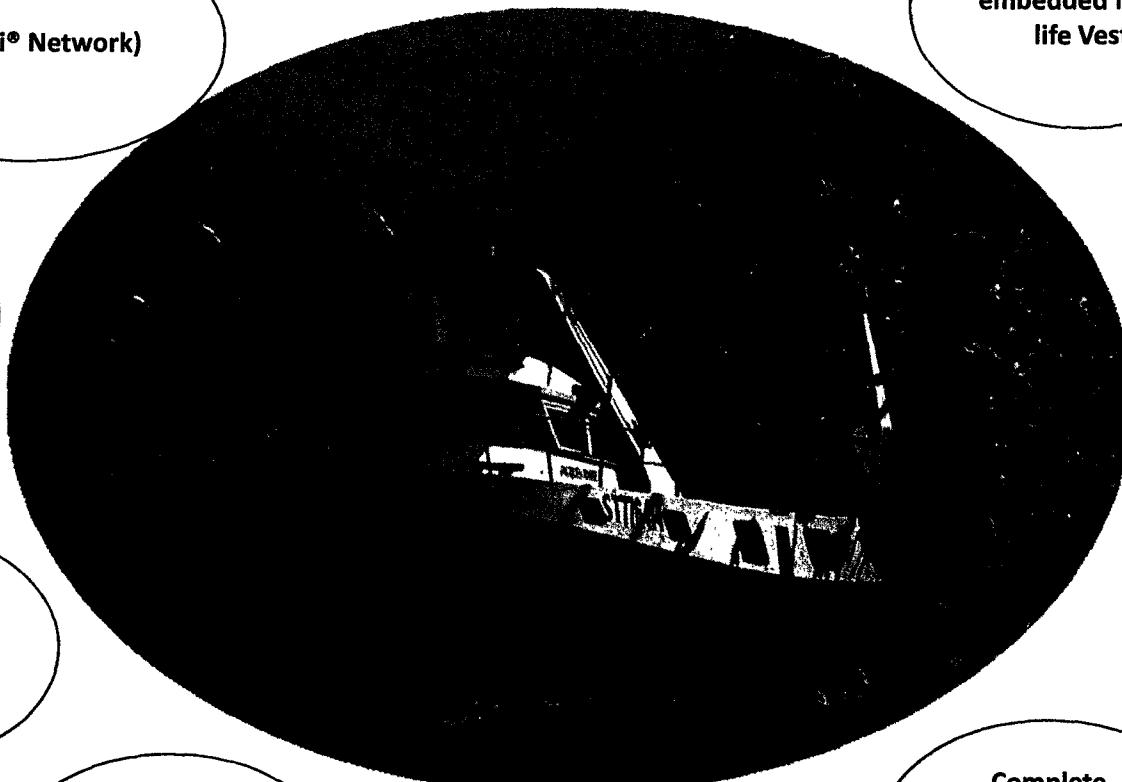
Informations,
duration of the
incident, user ID
and real-time GPS
coordinates of the
Man Overboard





seareka

8 Keyphrases which define our system



Work in flotilla
(Divansi® Network)

Instant
tracking UP
to 30 beacons

Intuitive
Search
Interface

Continuous GPS
Positioning

Integrated Flash
Lamp

Beacon
embedded in the
life Vest

Instant alert

Beacon with
manual and
automatic
activation

Complete
management of
false alarms